

# Practice

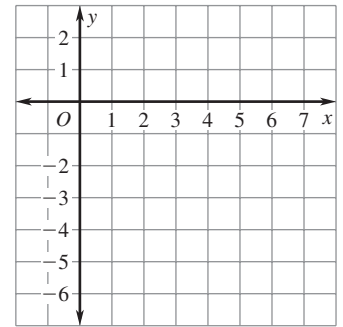
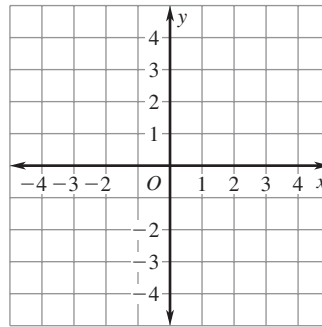
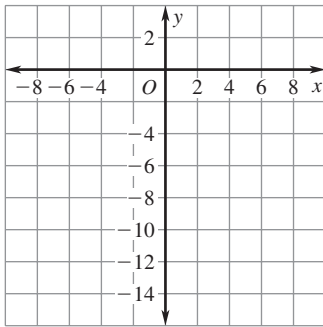
For use with pages 426–430

Let  $f(x) = 4x - 3$  and  $h(x) = -5x + 7$ . Find the indicated value.

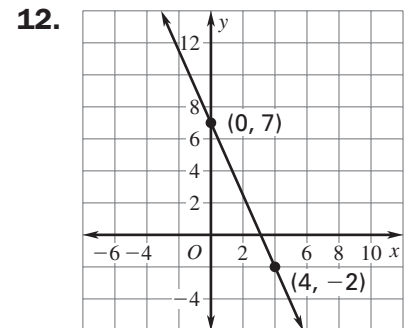
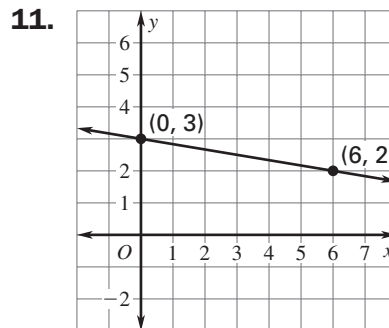
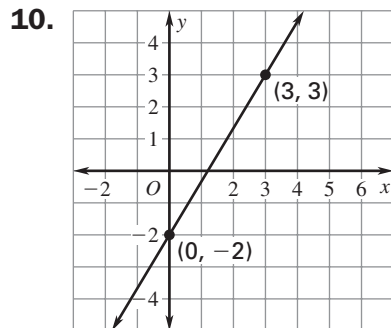
1.  $f(x)$  when  $x = 6$
2.  $h(x)$  when  $x = -5$
3.  $x$  when  $f(x) = -15$
4.  $x$  when  $h(x) = -13$
5.  $f(-3) + h(2)$
6.  $f(5) - h(0)$

Graph the function.

7.  $g(x) = 9x - 7$
8.  $h(x) = -\frac{4}{5}x + 1$
9.  $f(x) = \frac{2}{7}x - 3$



Write a linear function that represents the graph.



**Practice**

For use with pages 426–430

**Write a linear function that satisfies the given conditions.**

**13.**  $f(0) = 40, f(30) = 65$

**14.**  $f(-7) = 8, f(0) = 12$

**15.**  $d(-13) = -9, d(0) = -2$

**16.**  $g(0) = 111, g(25) = 286$

**17.** A PVC (polyvinylchloride) recycling plant uses recent technology to separate PVC from scrap by dissolving the PVC. By 2004, the plant had recycled a total of 20,000 metric tons of PVC. The plant recycles about 8500 metric tons per year. Let  $t$  be the number of years since 2004. Use function notation to write an equation giving the total amount of PVC recycled by the plant as a function of  $t$ .

**18.** Currently, there are 4120 gallons of water in Alexa's swimming pool. When filled to the recommended level, the pool holds 4550 gallons. Using a garden hose, she adds 6 gallons of water per minute to the pool.

**a.** Use function notation to write an equation giving the amount of water in the pool as a function of the number of minutes  $x$  that Alexa runs the hose.

**b.** How long will it take Alexa to fill the pool?